

Express Mail No.  
EV133106815US



VPI/95-09 DIV

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE **RECEIVED**

OCT 15 2003

Examiner : Marjorie A. Moran  
Group Art Unit : 1631  
Applicant(s) : David Armistead et al.  
Application No. : 09/431,469 Confirmation No.: 8756  
Filed : November 1, 1999  
For : MOLECULES COMPRISING A CALCINEURIN-LIKE BINDING POCKET AND ENCODED DATA STORAGE MEDIUM CAPABLE OF GRAPHICALLY DISPLAYING THEM

TECH CENTER 1600/2900

New York, New York  
October 3, 2003

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.56 and 1.97, applicants make of record the following documents\*:

OTHER DOCUMENTS

Balbes, L.M., et al., "A Perspective of Modern Methods in Computer-Aided Drug Design," in "Reviews in Computational Chemistry," K.B. Lipkowitz and D.B. Boyd, Eds., VCH Publishers, New York, 5: 337-379 (1994).

---

\* A completed Form PTO-1449 listing these documents is attached hereto.

Bartlett, P.A., et al., "CAVEAT: A Program to Facilitate the Structure-Derived Design of Biologically Active Molecules," in "Molecular Recognition in Chemical and Biological Problems," S.M. Roberts, Ed., Royal Society of Chemistry, Special Publication No. 78: 182-196 (1989).

Böhm, H.-J., "The Computer Program LUDI: A New Method for the De Novo Design of Enzyme Inhibitors," *J. Comp. Aid. Molec. Design*, 6: 61-78 (1992).

Cohen, N.C., et al., "Molecular Modeling Software and Methods for Medicinal Chemistry," *J. Med. Chem.*, 33: 883-894 (1990).

Eisen, M.B., et al., "HOOK: A Program for Finding Novel Molecular Architectures that Satisfy the Chemical and Steric Requirements of a Macromolecule Binding Site," *Proteins Struct. Funct. Genet.*, 19: 199-221 (1994).

Gillet, V., et al., "SPROUT: A Program for Structure Generation," *J. Comp. Aid. Molec. Design*, 7: 127-153 (1993).

Goodford, P.J., "A Computational Procedure for Determining Energetically Favorable Binding Sites on Biologically Important Macromolecules," *J. Med. Chem.*, 28: 849-857 (1985).

Goodsell, D.S., and Olson, A.J., "Automated Docking of Substrates to Proteins by Simulated Annealing," *Proteins Struct. Funct. Genet.*, 8: 195-202 (1990).

Guida, W.C., "Software for Structure-Based Drug Design," *Curr. Opin. Struct. Biology*, 4: 777-781 (1994).

Kuntz, I.D., et al., "A Geometric Approach to Macromolecule-Ligand Interactions," *J. Mol. Biol.*, 161: 269-288 (1982).

Lauri, G. and Bartlett, P.A., "CAVEAT: A Program to Facilitate the Design of Organic Molecules," *J. Comp. Aid. Molec. Design*, 8: 51-66 (1994).

Martin, Y.C., "3D Database Searching in Drug Design," *J. Med. Chem.*, 35: 2145-2154 (1992).

Miranker, A., and Karplus, M., "Functionality Maps of Binding Sites: A Multiple Copy Simultaneous Search Method," *Proteins Struct. Funct. Genet.*, 11: 29-34 (1991).

Meng, E.C., et al., "Automated Docking with Grid-Based Energy Evaluation," *Journal of Computational Chemistry*, 13: 505-524 (1992).

Navia, M.A. and Murcko, M.A., "Use of Structural Information in Drug Design," *Current Opinion Structural Biology*, 2: 202-210 (1992).

Nishibata, Y., and Itai, A., "Automatic Creation of Drug Candidate Structures Based on Receptor Structure. Starting Point for Artificial Lead Generation." *Tetrahedron*, 47: 8985-8990 (1991).

Applicants request that the cited documents be (1) fully considered by the Examiner during the course of examination of this application, and (2) printed on any patent issuing from this application. Applicants further request that a copy of form PTO-1449, as considered and initialed by the Examiner, be returned with the next communication.

Respectfully submitted,

*Lawrence M. Brown*  
James F. Haley, Jr. (Reg. No. 27,794)  
Attorney for Applicants  
Li Su (Reg. No. 45,141)  
Lawrence M. Brown (Reg. No. 52,660)  
Agents for Applicants  
c/o FISH & NEAVE  
1251 Avenue of the Americas  
New York, New York 10020-1104  
Tel.: (212) 596-9000  
Fax.: (212) 596-9090

Express Mail No.  
EV133106815US

VPI/95-09 DIV



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**RECEIVED**

Examiner : Marjorie A. Moran OCT 15 2003  
Group Art Unit : 1631  
Applicant(s) : David Armistead et al. TECH CENTER 1600/2900  
Application No. : 09/431,469 Confirmation No.: 8756  
Filed : November 1, 1999  
For : MOLECULES COMPRISING A CALCINEURIN-LIKE BINDING POCKET AND ENCODED DATA STORAGE MEDIUM CAPABLE OF GRAPHICALLY DISPLAYING THEM

New York, New York  
October 3, 2003

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

TRANSMITTAL LETTER FOR SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir:

Transmitted herewith are an Information Disclosure Statement, Form PTO-1449 (in duplicate), and copies of references cited therein in the above-identified application. This Statement is submitted more than three months from the application filing date and after the mailing date of the first Office Action on the merits, but before the mailing date of either a final action under 37 C.F.R. § 1.113, or a notice of allowance under 37 C.F.R. § 1.311.

In accordance with 37 C.F.R. § 1.97, the fee of \$180, as set forth in 37 C.F.R. § 1.17(p), is required. The Director is hereby authorized to charge payment of said fee to Deposit Account No. 06-1075.

The Director is also hereby authorized to charge payment of any additional fees required in connection with the accompanying Information Disclosure Statement, or credit any overpayment, to Deposit Account No. 06-1075. A duplicate copy of this letter is transmitted herewith.

Respectfully submitted,

*James M. Brown*  
\_\_\_\_\_  
James F. Haley (Reg. No. 27,794)  
Attorney for Applicants  
Li Su (Reg. No. 45,141)  
Lawrence M. Brown (Reg. No. 52,660)  
Agents for Applicants  
c/o FISH & NEAVE  
1251 Avenue of the Americas  
New York, New York 10020-1104  
Tel.: (212) 596-9000  
Fax.: (212) 596-9090



10.06.03 41

1634  
1/1

VPI/95-09 DIV

Examiner : Marjorie Moran  
Group Art Unit : 1631 **RECEIVED**  
Applicants : David M. Armistead et al. **OCT 15 2003**  
Application No. : 09/431,469 **TECH CENTER 1600/2000**  
Confirmation No. : 8756  
Filed : November 1, 1999  
For : MOLECULES COMPRISING A CALCINEURIN-LIKE BINDING POCKET AND ENCODED DATA STORAGE MEDIUM CAPABLE OF GRAPHICALLY DISPLAYING THEM

Express Mail mailing label number EV133106815US

Date of Deposit October 3, 2003

I hereby certify that this paper/fee is being deposited with the United States Postal Service "EXPRESS MAIL POST OFFICE TO ADDRESSEE" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to the Hon. Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

  
\_\_\_\_\_  
Lillian Garcia

Enclosures:

Transmittal Letter (in duplicate);  
Supplemental Information Disclosure Statement;  
Form PTO-1449 (in duplicate);  
Copies of References Cited; and  
Postcard



FORM PTO-1449

U. S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEINFORMATION DISCLOSURE  
STATEMENT BY APPLICANTATTY. DOCKET NO.  
VPI/95-09 DIVAPPLN. NO.  
09/431,469APPLICANTS  
David Armistead et  
al.CONFIRMATION NO.  
8756FILING DATE  
November 1, 1999GROUP  
1631RECEIVED

OCT 15 2003

TECH CENTER 1600/2900

## U. S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER INITIAL	
------------------	--

	Balbes, L.M., et al., "A Perspective of Modern Methods in Computer-Aided Drug Design," in "Reviews in Computational Chemistry," K.B. Lipkowitz and D.B. Boyd, Eds., VCH Publishers, New York, 5: 337-379 (1994).
	Bartlett, P.A., et al., "CAVEAT: A Program to Facilitate the Structure-Derived Design of Biologically Active Molecules," in "Molecular Recognition in Chemical and Biological Problems," S.M. Roberts, Ed., Royal Society of Chemistry, Special Publication No. 78: 182-196 (1989).
	Böhm, H.-J., "The Computer Program LUDI: A New Method for the De Novo Design of Enzyme Inhibitors," J. Comp. Aid. Molec. Design, 6: 61-78 (1992).
	Cohen, N.C., et al., "Molecular Modeling Software and Methods for Medicinal Chemistry," J. Med. Chem., 33: 883-894 (1990).

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 <i>OCT 03 2003</i> PATENT & TRADEMARK OFFICE U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT	ATTY. DOCKET NO. VPI/95-09 DIV	APPLN. NO. 09/431,469
		APPLICANTS David Armistead et al.	CONFIRMATION NO. 8756
		FILING DATE November 1, 1999	GROUP 1631

	Eisen, M.B., et al., "HOOK: A Program for Finding Novel Molecular Architectures that Satisfy the Chemical and Steric Requirements of a Macromolecule Binding Site," <i>Proteins Struct. Funct. Genet.</i> , 19: 199-221 (1994).
	Gillet, V., et al., "SPROUT: A Program for Structure Generation," <i>J. Comp. Aid. Molec. Design</i> , 7: 127-153 (1993).
	Goodford, P.J., "A Computational Procedure for Determining Energetically Favorable Binding Sites on Biologically Important Macromolecules," <i>J. Med. Chem.</i> , 28: 849-857 (1985).
	Goodsell, D.S., and Olson, A.J., "Automated Docking of Substrates to Proteins by Simulated Annealing," <i>Proteins Struct. Funct. Genet.</i> , 8: 195-202 (1990).
	Guida, W.C., "Software for Structure-Based Drug Design," <i>Curr. Opin. Struct. Biology</i> , 4: 777-781 (1994).
	Kuntz, I.D., et al., "A Geometric Approach to Macromolecule-Ligand Interactions," <i>J. Mol. Biol.</i> , 161: 269-288 (1982).
	Lauri, G. and Bartlett, P.A., "CAVEAT: A Program to Facilitate the Design of Organic Molecules," <i>J. Comp. Aid. Molec. Design</i> , 8: 51-66 (1994).
	Martin, Y.C., "3D Database Searching in Drug Design," <i>J. Med. Chem.</i> , 35: 2145-2154 (1992).
	Miranker, A., and Karplus, M., "Functionality Maps of Binding Sites: A Multiple Copy Simultaneous Search Method," <i>Proteins Struct. Funct. Genet.</i> , 11: 29-34 (1991)..
	Meng, E.C., et al., "Automated Docking with Grid-Based Energy Evaluation," <i>Journal of Computational Chemistry</i> , 13: 505-524 (1992).
	Navia, M.A. and Murcko, M.A., "Use of Structural Information in Drug Design," <i>Current Opinion in Structural Biology</i> , 2: 202-210 (1992).
	Nishibata, Y., and Itai, A., "Automatic Creation of Drug Candidate Structures Based on Receptor Structure. Starting Point for Artificial Lead Generation." <i>Tetrahedron</i> , 47: 8985-8990 (1991).

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEINFORMATION DISCLOSURE  
STATEMENT BY APPLICANTATTY. DOCKET NO.  
VPI/95-09 DIVAPPLN. NO.  
09/431,469APPLICANTS  
David Armistead et  
al.CONFIRMATION NO.  
8756FILING DATE  
November 1, 1999GROUP  
1631


EXAMINER

DATE CONSIDERED

**EXAMINER:** Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not conformance and not considered. Include copy of this form with next communication to applicant.